

12/02/13 Agenda

- Warm Up
- Hand out Unit Targets & Assignment Sheet
- Review Homework - Worksheet 5.1 day 2
- Review Section 5.1
 - Rate of Change
 - From a Table
 - From a Graph
 - Slope
- Homework - 5.1 Review Worksheet
- **Quiz on 5.1 TOMORROW!!**

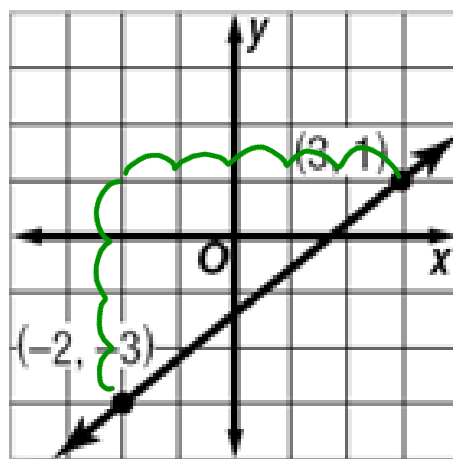
Warm Up:

Find the Rate of Change from the table and graph:

x	y
2	15
5	9
8	3
11	-3
14	-9

Handwritten notes: $+3$ and $+3$ are written to the left of the first two rows, and -6 and -6 are written to the right of the first two rows, indicating a constant change in y for a constant change in x.

$$R.o.C = \frac{\Delta y}{\Delta x} = \frac{-6}{3} = -2$$



$$\frac{+4}{5} = \frac{4}{5}$$

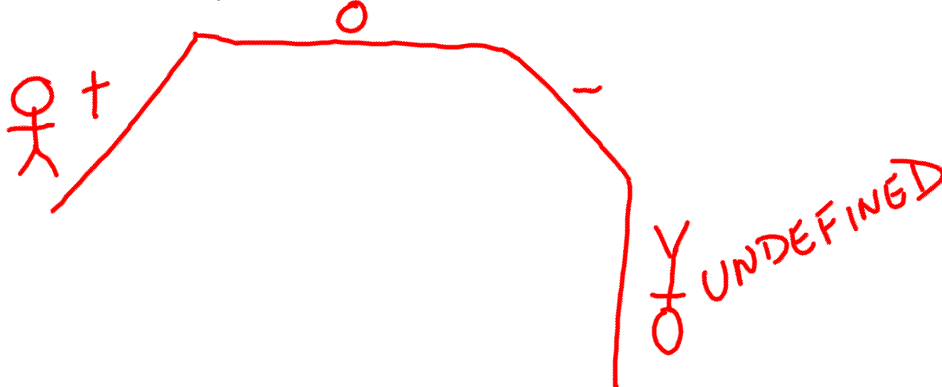
5.1 - Review

Slope: On a non-vertical line, slope is the ratio of vertical change (rise) to horizontal change (run).



It is also referred to as:

- - Rate of change
- Steepness of a line



Slope Formula:

$$\frac{\text{RISE}}{\text{RUN}} = \frac{y_2 - y_1}{x_2 - x_1} = m$$

Find the Slope:

POINT 1 → x_1, y_1 (6, 4) x_2, y_2 (4, 0) ← POINT 2

$$\frac{0 - 4}{4 - 6} = \frac{-4}{-2} = 2$$

Larkin Method
(stack & subtract)

$$\begin{array}{r} (6 \ 4) \\ - (4 \ 0) \\ \hline 2 \ 4 \\ \hline \end{array} = \frac{4}{2} = 2$$

5.1 - Review

Slope
Formula:

$$\frac{y_2 - y_1}{x_2 - x_1} = m$$

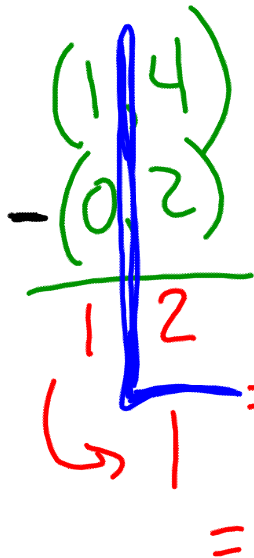
Find the Slope:

(2, 3) (4, 7)

$$m = 2$$

(10, 2) (6, 4)

$$m = -\frac{1}{2}$$



(1, 4) (0, 2)

$$m = +2$$

x_1 y_1 x_2 y_2
(5, -2) (5, 3)

$$\text{UNDEFINED} \quad \frac{3 - (-2)}{5 - 5} = \frac{5}{0}$$

(3, 6) (4, 7)

$$m = 1$$

(10, -2) (3, -2)

$$m = \frac{0}{7} = 0$$

